

IN THE CLAIMS:

1. (Currently Amended) A brush block for transmitting currents to a slip ring, the brush block comprising:

a brush block body; and

a plurality of multiwire sliding elements (MWSEs) connected electrically in parallel and arranged at said brush block body one after another and distributed in an arc in a direction of sliding wherein said MWSEs form MWSE layers , which are arranged in an overlapping, scale-like structure, and describe an enveloping curve that is concentric with an axis of the slip ring with the ends of said MWSE.

2. (Previously presented) A brush block in accordance with claim 1, wherein said brush block body has a MWSE carrier with a bent inner wall, at which said plurality of MWSEs are arranged.

3. (Currently Amended) A brush block in accordance with claim [[1]] 6, wherein said MWSEs form MWSE layers , which are arranged in an overlapping, scale-like structure, and describe an enveloping curve that is concentric with an axis of the slip ring with the ends of said MWSE.

4. (Previously presented) A brush block in accordance with claim 3, wherein said MWSE layers have different numbers of said MWSE.

5. (Previously presented) A brush block in accordance with claim 3, wherein said MWSE of said adjacent layers have a lateral offset and are arranged staggered.

6. (Currently Amended) A brush block ~~in accordance with claim 2~~ for transmitting currents to a slip ring, the brush block comprising:

a brush block body; and

a plurality of multiwire sliding elements (MWSEs) connected electrically in parallel and arranged at said brush block body one after another and distributed in an arc in a direction of sliding, wherein said brush block body has a MWSE carrier with a bent inner wall, at which said plurality of MWSEs are arranged and wherein said MWSE carrier has at said inner wall a plurality of stepped incisions which are arranged in an arc on the circumferential side and at which said MWSEs are arranged.

7. (Previously presented) A brush block in accordance with claim 6, wherein said stepped incisions have a step side that is essentially tangential to said slip ring and a step side that is arranged at right angles thereto.

8. (Previously presented) A brush block in accordance with claim 1, wherein each of said MWSEs comprise a conductive carrier leaf with multiwire slip rings arranged thereon.

9. (Previously presented) A brush block in accordance with claim 8, wherein said wires

of said multiwire slip ring are bent at the free end.

10. (Previously presented) A brush block in accordance with claim 8, wherein said wires of said multiwire slip ring are integrated in a one-layer or multilayer paintbrush structure.

11. (Previously presented) A brush block in accordance with claim 1, wherein a plurality of said brush blocks can be arranged next to one another and distributed over the circumference of a slip ring.

12 - 13. (Canceled).

14. (Currently Amended) A rotating current transmission unit comprising:

a slip ring; and

a brush block, said slip ring and said brush block being mounted rotatably in relation to one another, said brush block comprising a brush block body and a plurality of multiwire sliding elements connected electrically in parallel and arranged at said brush block body one after another and distributed in an arc in a direction of sliding, wherein said multiwire sliding elements form multiwire sliding element layers, which are arranged in an overlapping, scale-like structure, and describe an enveloping curve that is concentric with an axis of the slip ring.

15. (Previously presented) A rotating current transmission unit in accordance with claim 14, wherein said current transmission unit has terminals for power current.